AN EFFECT OF COGNITIVE ABILITY, EMOTIONAL MATURITY AND CREATIVITY ON ACADEMIC ACHIEVEMENT AMONG SECONDARY SCHOOL STUDENTS

RESEARCH PROPOSAL

FOR

DOCTOR OF PHILOSOPHY

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Submitted by
Research Scholar
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An Effect of Cognitive Ability, Emotional Maturity and Creativity on Academic Achievement among Secondary School Students

Introduction

Education performs a completely critical position in human improvement. Education converts an instinctive being right into a rational being. Education in its actual feel is to humanize humanity and makes the existence of a person advanced, cultured and civilized. Education is the improvement of all the ones capabilities with inside the person with the intention to allow him to govern his environment. Education facilitates someone to stay a higher existence and greater importantly to come to be a social being. Education facilitates in the purchase of knowledge, competencies and behavior and leads to amendment of behaviour. Education pursuits on the healthy improvement of personality, this is physical, intellectual, social, emotional and ethical improvement. It is a society that makes guy, cultured; in truth guy acquires the entirety from society. Education is getting to know wherein the knowledge, competencies, values, ideals and behavior of a collection of humans are transmitted from one technology to the following technology. Education is an antique because the human race. It is in no way finishing technique of internal increase and improvement and its duration stretches from cradle to grave.

Cognitive capacity has a critical restrictive impact on whether or not younger humans can gain instructional success. Cognitive capacity refers back to the capacity of the human mind to process, store, and extract

information, along with attention, memory, and reasoning capacity. It is a key mental detail for humans to effectively whole an activity

Emotional adulthood is the feature of emotional conduct this is commonly attained through a grownup after the expiry of his youth period. After achieving emotional adulthood, he's capable of show a well- balanced emotional conduct in his daily lifestyles. A individual might also additionally stated to be emotionally matures, if he has in his ownership nearly all styles of emotions, advantageous or poor and is capable of explicit them at the ideal time in the precise diploma. According to Jersild (1963), emotional adulthood method the diploma to which the individual has found out his capability for richness of residing and has advanced his potential to revel in things, to narrate himself to others. Emotional adulthood is a kingdom of balanced feeling and self-control. Academic success is of high-quality significance for students. It is laid low with fundamental elements: subjective elements or man or woman elements and goal elements or environmental elements. Secondary schooling is a gateway to the possibilities and blessings of financial and social development. Quality secondary schooling is necessary in growing a vivid destiny for people and countries alike. Secondary schooling marks the primary turning factor with inside the instructional lifestyles of the man or woman. At this level the kids are ready with the abilities and records essential to govern with inside the subsequent better level of schooling.

Creativity is the potential to find out new answers to troubles or to provide new ideas, innovations or works of art. It is a unique shape of

wondering, a manner of viewing the sector and interacting with it in a way exceptional from that of the overall population. The significance of creativity has been felt so strongly as within side the current time. Along with the development of human civilization, new and nevertheless more modern troubles are to be encountered in everyday lifestyles, which at once venture our innovative cap potential in each stroll of lifestyles. There is without a doubt want for an exceptional form of wondering which could smoother the lifestyles style. This ought to best be attained best if kids with innovative cap potential are recognized in advance and those abilities will be developed. It is clear that during our current and unexpectedly growing civilization the spontaneity of our innovative potential ought to be the maximum favored nice of each humans, creativity is one of the maximum fantastically valued traits of humans due to the fact innovative acts have an effect on exceptionally now no longer best clinical development however additionally society in general. The country which research quality the way to identify, broaden and inspire creativity of their people, might also additionally discover themselves in a completely superb position.

Academic achievement is that the level of schooling that a private with success completes and also the ability to achieve success in studies. What is more it's been the subject of interest and conjointly for analysis within the recent past. The achievement obtain a seems at thinks about with measurement what a candidate has learned to try. It measures the quantity of data no inheritable when learning method, the take a look at measures the

gains of instructional programmes; what a student has no inheritable from the method of learning, (Olatoye, 2011) educational action of student is that the ability of the scholar to check and bear in mind facts and having the ability to speak his data orally or in written kind even in an examination condition. Pedagogy plays an important role in giving birth the muse for the any education of pupils. If a decent foundation is set at the Gymnasium level, pupils will higher deal with the challenges of life and profession with nice ease.

Rationale for the Study – Empirical Evidences for the selected variables

The research studies conducted so far in the areas of students cognitive ability, school adjustment, emotional maturity and correlates of academic achievement form the basis of setting objectives and hypotheses for the present study. Thus, the critical appraisal of the related studies is presented below;

1. Cognitive ability

Nalini Nithya S and Vasuki N (2018) The cognitive abilities test measures students learned reasoning abilities in the new line three areas most linked to academic success in school: Verbal, Quantitative and Nonverbal. Its new line primary goal is to assess students reasoning abilities. The study revealed that the difference in new line Gender, Locality, and Medium of instruction had significant influence on Verbal Reasoning Ability, newline Quantitative Reasoning Ability and Non-Verbal Reasoning Ability. The correlation coefficient new line revealed that there was significant correlation

between three dimensions namely Verbal Ability, newline Quantitative Ability and Non-Verbal Ability in relation to Academic Achievement of the pupils. It new line was noted that the quantitative ability is significantly higher than the verbal ability and non-verbal new line ability among the boys and girls. ***Y.L. Chong (2016)*** conducted a study on inferential analysis was used to explore the relationship between cognitive abilities and academic achievement of the respondents. The study revealed that the significant relationship between all cognitive abilities except knowledge and academic achievement. The critical thinking, creative thinking, and metacognition have significant predictive power on undergraduates' academic performance. Critical thinking has the highest predictive power while creative thinking has the lowest predictive power on academic achievement.

2. Emotional Maturity

Rukmini S. and Ramaswamy C. (2021) conducted study on emotional stability and academic achievement a significant relationship which interprets that as emotional stability increases academic achievement also increases and emotional progression and academic achievement are having a significant relationship which further interprets that increase in emotional progression will also lead to increase in academic achievement. Study revealed that the observed social adjustment and academic achievement a non-significant association between them which means that increase in social adjustment may not lead to increase in academic achievement. Study revealed that the positive and highly significant relationship between

emotional stability, emotional progression, personality integration, independence and total emotional maturity and academic achievement; while only social adjustment was found to not have a significant relationship. **Altaf Hussain Ganie and Mohammad Yousuf Ganai (2021)**, the study revealed that 10.25%, 55.25% and 34.50% of low, moderate and high levels of emotional maturity have been found among adolescents of Kashmir respectively. A significant difference was found between male and female adolescents of Kashmir on emotional maturity, males were found to be more emotionally mature than females. A significant difference was found between government and private secondary school students on academic achievement. Private school students have more academic achievement than government school students. Moreover, a positive correlation was found between emotional maturity and academic achievement among secondary school students of Kashmir. **(Amit & Reena, 2012)** conducted study on part of emotional maturity and emotional intelligence in learning and achievement, on 300 male Intermediate students of Meerut city. Discoveries uncover that emotional maturity has unimportant impact on adapting however huge impact on academic achievement. Emotional maturity has irrelevant impact on adapting however huge impact on academic achievement.

3. Creativity

Jadab Dutta and Suresh Rajkonwar (2018) an investigated study on creativity of secondary school students of Dhemaji district of Assam. This study is conducted on a sample of 200 Students, 100 boys and 100 girls

selected randomly from 08 Government and Private secondary schools of Dhemaji district of Assam. The schools were selected using stratified random sampling technique. The researcher used the verbal creativity test developed by Baqer Mehdi. This test has four activities. First three activities have three questions or problems, each problem related to three factors namely; fluency, flexibility and originality and last activity are descriptive type. The study revealed that there was no significant mean difference on creativity between male and female secondary students of Dhemaji district. There was no significant mean difference on creativity between rural and urban secondary school students of Dhemaji district. There was no significant mean difference on creativity between government and private secondary students of Dhemaji district of Assam. **Shah Bano. Marium Din and Mehwish Jabeen (2021)** an investigated study on relationship of creativity and academic performance of students at undergraduate level. Objectives of the study explore the correlation between creativity and academic performance. Find out the correlation of domains of creativity and academic performance of students. Correlation research design was used for the study to explore the relationship among various components of creativity and academic performance of undergraduates. Findings of the study are that there is no correlation between creativity, self/everyday creativity, scholarly creativity, performance creativity, scientific creativity, artistic creativity and academic performance of students at undergraduate level.

General Objectives of the Study

1. To study the effect of students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography
2. To study the effect of boys Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography
3. To study the effect of girls Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography
4. To study the effect of urban students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography
5. To study the effect of rural students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography
6. To study the effect of government school students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography
7. To study the effect of private school students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

Methodology

Variables

Independent Variables to be considered in the study

i. Cognitive ability

ii. Emotional maturity

iii. Creativity

Dependent Variables to be considered in the study

Academic Achievement in Geography

Moderator Variables to be considered in the study

i. Gender (boys and girls)

ii. Locality (urban and rural)

iii. Types of Management (government and private)

Specific Objectives of the Study

i. Entire sample

1. To study the effect of students Cognitive ability on Academic achievement in geography
2. To study the effect of students Emotional maturity on Academic achievement in geography
3. To study the effect of students Creativity on Academic achievement in geography
4. To study the interaction effect of students Cognitive ability and Emotional maturity on Academic achievement in geography
5. To study the interaction effect of students Cognitive ability and Creativity on Academic achievement in geography
6. To study the interaction effect of students Emotional maturity and Creativity on Academic achievement in geography
7. To study the interaction effect of students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

ii. Boys

8. To study the effect of boys Cognitive ability on Academic achievement in geography
9. To study the effect of boys Emotional maturity on Academic achievement in geography
10. To study the effect of boys creativity on Academic achievement in geography
11. To study the interaction effect of boys Cognitive ability and Emotional maturity on Academic achievement in geography
12. To study the interaction effect of boys Cognitive ability and Creativity on Academic achievement in geography
13. To study the interaction effect of boys Emotional maturity and Creativity on Academic achievement in geography
14. To study the interaction effect of boys Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

iii. Girls

15. To study the effect of girls Cognitive ability on Academic achievement in geography
16. To study the effect of girls Emotional maturity on Academic achievement in geography
17. To study the effect of girls Creativity on Academic achievement in geography

18. To study the interaction effect of girls Cognitive ability and Emotional maturity on Academic achievement in geography
19. To study the interaction effect of girls Cognitive ability and Creativity on Academic achievement in geography
20. To study the interaction effect of girls Emotional maturity and Creativity on Academic achievement in geography
21. To study the interaction effect of girls Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

iv. Urban students

22. To study the effect of urban students Cognitive ability on Academic achievement in geography
23. To study the effect of urban students Emotional maturity on Academic achievement in geography
24. To study the effect of urban students Creativity on Academic achievement in geography
25. To study the interaction effect of urban students Cognitive ability and Emotional maturity on Academic achievement in geography
26. To study the interaction effect of urban students Cognitive ability and Creativity on Academic achievement in geography
27. To study the interaction effect of urban students Emotional maturity and Creativity on Academic achievement in geography

28. To study the interaction effect of urban students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

v. Rural students

22. To study the effect of rural students Cognitive ability on Academic achievement in geography
23. To study the effect of rural students Emotional maturity on Academic achievement in geography
24. To study the effect of rural students Creativity on Academic achievement in geography
25. To study the interaction effect of rural students Cognitive ability and Emotional maturity on Academic achievement in geography
26. To study the interaction effect of rural students Cognitive ability and Creativity on Academic achievement in geography
27. To study the interaction effect of Rural students Emotional maturity and Creativity on Academic achievement in geography
28. To study the interaction effect of rural students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

vi. Government school students

36. To study the effect of government school students Cognitive ability on Academic achievement in geography

37. To study the effect of government school students Emotional maturity on Academic achievement in geography
38. To study the effect of government school students Creativity on Academic achievement in geography
39. To study the interaction effect of government school students Cognitive ability and Emotional maturity on Academic achievement in geography
40. To study the interaction effect of government school students Cognitive ability and Creativity on Academic achievement in geography
41. To study the interaction effect of Government school students Emotional maturity and Creativity on Academic achievement in geography
42. To study the interaction effect of government school students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

vii. Private school students

36. To study the effect of private school students Cognitive ability on Academic achievement in geography
37. To study the effect of private school students Emotional maturity on Academic achievement in geography
38. To study the effect of private school students Creativity on Academic achievement in geography

39. To study the interaction effect of private school students Cognitive ability and Emotional maturity on Academic achievement in geography
40. To study the interaction effect of private school students Cognitive ability and Creativity on Academic achievement in geography
41. To study the interaction effect of Private school students Emotional maturity and Emotional maturity on Academic achievement in geography
42. To study the interaction effect of private school students Cognitive ability, Emotional maturity and Creativity on Academic achievement in geography

Research Hypotheses

In pursuance of the specific objectives 1-49 the following research hypotheses were framed:

i. Entire sample

1. Effects of high and low cognitive ability of students' differ significantly in terms of their influence on Academic achievement in geography.
2. Effects of high and low emotional maturity of students' differ significantly in terms of their influence on Academic achievement in geography.
3. Effects of high and low Creativity of students differ significantly in terms of their influence on Academic achievement in geography.

4. Interaction effects of students' Cognitive ability X Emotional maturity differ significantly in terms of their influence on Academic achievement in geography.
5. Interaction effects of students' Cognitive ability X Creativity differ significantly in terms of their influence on Academic achievement in geography.
6. Interaction effects of students' Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.
7. Interaction effects of students' Cognitive ability X Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.

ii. Boys

8. Effects of high and low Cognitive ability of boys' differ significantly in terms of their influence on Academic achievement in geography.
9. Effects of high and low Emotional maturity of boys' differ significantly in terms of their influence on Academic achievement in geography.
10. Effects of high and low Creativity of boys' differ significantly in terms of their influence on Academic achievement in geography.
11. Interaction effects of boys' Cognitive ability X Emotional maturity differ significantly in terms of their influence on Academic achievement in geography.

12. Interaction effects of boys' Cognitive ability X Creativity differ significantly in terms of their influence on Academic achievement in geography.
13. Interaction effects of boys' Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.
14. Interaction effects of boys' Cognitive ability X Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.

iii. Girls

15. Effects of high and low Cognitive ability of girls' differ significantly in terms of their influence on Academic achievement in geography.
16. Effects of high and low Emotional maturity of girls' differ significantly in terms of their influence on Academic achievement in geography.
17. Effects of high and low Creativity of girls' differ significantly in terms of their influence on Academic achievement in geography.
18. Interaction effects of girls' Cognitive ability X Emotional maturity differ significantly in terms of their influence on Academic achievement in geography.
19. Interaction effects of girls' Cognitive ability X Creativity differ significantly in terms of their influence on Academic achievement in geography.

20. Interaction effects of girls' Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.
21. Interaction effects of girls' Cognitive ability X Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.

iv. Urban students

22. Effects of high and low Cognitive ability of urban students' differ significantly in terms of their influence on Academic achievement in geography.
23. Effects of high and low Emotional maturity of urban students' differ significantly in terms of their influence on Academic achievement in geography.
24. Effects of high and low Creativity of urban students' differ significantly in terms of their influence on Academic achievement in geography.
25. Interaction effects of urban students' Cognitive ability X Emotional maturity differ significantly in terms of their influence on Academic achievement in geography.
26. Interaction effects of urban students' Cognitive ability X Creativity differ significantly in terms of their influence on Academic achievement in geography.

27. Interaction effects of urban students' Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.
28. Interaction effects of urban students' Cognitive ability X Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.

v. Rural students

29. Effects of high and low Cognitive ability of rural students' differ significantly in terms of their influence on Academic achievement in geography.
30. Effects of high and low Emotional maturity of rural students' differ significantly in terms of their influence on Academic achievement in geography.
31. Effects of high and low Creativity of rural students' differ significantly in terms of their influence on Academic achievement in geography.
32. Interaction effects of rural students' Cognitive ability X Emotional maturity differ significantly in terms of their influence on Academic achievement in geography.
33. Interaction effects of rural students' Cognitive ability X Creativity differ significantly in terms of their influence on Academic achievement in geography.

34. Interaction effects of rural students' Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.
35. Interaction effects of rural students' Cognitive ability X Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.

vi. Government school students

36. Effects of high and low Cognitive ability of government school students' differ significantly in terms of their influence on Academic achievement in geography.
37. Effects of high and low Emotional maturity of government school students' differ significantly in terms of their influence on Academic achievement in geography.
38. Effects of high and low Creativity of government school students' differ significantly in terms of their influence on Academic achievement in geography.
39. Interaction effects of government school students' Cognitive ability X Emotional maturity differ significantly in terms of their influence on Academic achievement in geography.
40. Interaction effects of government school students' Cognitive ability X Creativity differ significantly in terms of their influence on Academic achievement in geography.

41. Interaction effects of government school students' Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.
42. Interaction effects of government school students' Cognitive ability X Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.

vii. Private school students

43. Effects of high and low Cognitive ability of private school students' differ significantly in terms of their influence on Academic achievement in geography.
44. Effects of high and low Emotional maturity of private school students' differ significantly in terms of their influence on Academic achievement in geography.
45. Effects of high and low Creativity of private school students' differ significantly in terms of their influence on Academic achievement in geography.
46. Interaction effects of private school students' Cognitive ability X Emotional maturity differ significantly in terms of their influence on Academic achievement in geography.
47. Interaction effects of private school students' Cognitive ability X Creativity differ significantly in terms of their influence on Academic achievement in geography.

48. Interaction effects of private school students' Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.
49. Interaction effects of private school students' Cognitive ability X Emotional maturity X Creativity differ significantly in terms of their influence on Academic achievement in geography.

Design of the Study

The present study is the descriptive study where a survey will be undertaken to measure the scores on Cognitive ability, Emotional maturity and Creativity of students' of IX standard in Vijayapura district with regard to their interaction effect on academic achievement in geography. The study will be carried out under the following five phases. Phase one: Selection of appropriate tools to measure the variables like Cognitive ability, Emotional maturity and Creativity. Phase two: Construction and validation of Academic achievement test in geography. Phase three: Selection of the sample for the study. Phase four: Collection of data. Phase five: Statistical analysis of data and report writing

Tools to be used in the Study

To test the hypotheses 1-49 formulated for the study, data will be collected with the help of following tools

a. Cognitive Ability

In order to measure this variable, the Cognitive ability Test *(CAT)* developed by Madhu Gupta and Bindiya Lakhani will be used.

b. Emotional maturity

In order to measure this variable, Emotional Maturity Scale (EMS) developed by Tara Sabapathy will be used.

c. Creativity

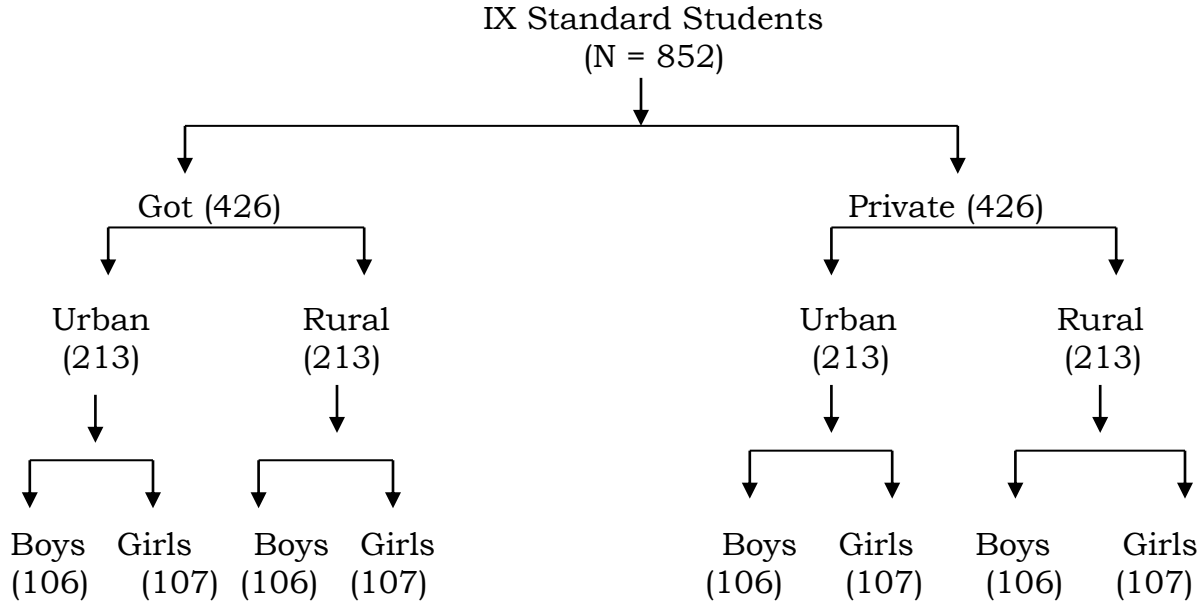
In order to measure this variable, Creativity (Passi Test of Creativity) developed by B. K. Passi will be used.

d. Academic Achievement in Geography

In the present study academic achievement in geography, which is a dependent variable, will be measured by developing an academic achievement test in geography on selected topics of IX standard text book with state syllabus.

Selection of the Sample

Using random sampling technique five hundred students will be selected from IX standard studying in secondary schools of Vijayapura district. The break of sample will be as follows.



Collection of Data

Required data relating to cognitive ability, emotional maturity and creativity of the students will be obtained by administering Cognitive Ability Test (CAT), Emotional Maturity Scale (EMS), and Creativity (Passi creativity test). The investigator also administer academic achievement test in geography to the students to collect the necessary data. The investigator will collect the essential data by visiting different secondary schools from Vijaypura district. The sex, management and location of the school will be collected through the personal data proforma.

Statistical Techniques

In pursuance of the objectives of the study as well as the research hypotheses, the 3-way Analysis of Variance technique and Scheffe's test will be used. The scores of academic achievement in geography will be converted into standard scores before use.

Analysis of Data

Scores relating to Cognitive ability (high-low), Emotional maturity (high - low), Creativity and Academic achievement in geography constitute the raw data for the present study. Thus, 2x2x2 factorial design will be used for analysis of data. The analysis of data will be presented fewer than seven sections. Section-1, deals with analysis of data pertaining to entire sample; Section-2 deals with analysis of data pertaining to boys; Section-3 deals with analysis of data pertaining to girls; Section-4 deals with analysis of data pertaining to urban students; Section-5 deals with analysis of data

pertaining to rural students; Section-6 deals with analysis of data pertaining to government school students; and Section-7 deals with analysis of data pertaining to private school students.

Definitions of Technical Terms

i. Cognitive ability

According to McGue & Bouchard (1998), Cognitive ability is one of the most extensively studied topics within the field of behavioural genetics.

According to Plomin (1999), Cognitive ability, sometimes referred to as general intelligence is essential for human adaptation and survival. It includes the capacity to "reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly, and learn from experience".

ii) Emotional Maturity:

"Emotional maturity is the ability to bear tension and it is the ability to develop high tolerance for disagree circumstance."

Smithson, (1974) Emotional maturity is a process in which the person is continuously striving for greater sense of emotional health, both intra-psychically and intra- personally.

Frank, (1964) Emotional maturity is the process of readjustment the infant loams under parental direction what situations after legal opportunities for emotional reactions and to what extent, so that primitive elemental psychological response that we call emotion becomes pattered in line with approved from the declaration favored by culture.

iii) Creativity:

A person's creativity is fostered when appropriate environment is present. Creative activities lead to innovation. While creativity is the art of producing new ideas, approach or action, innovation is the process of both generating and applying such creative ideas and converting them into novel, useful and viable products, services and business practices.

A common definition from Webster's – Creativity is marked by the ability or power to create — to bring into existence, to invest with a new form, to produce through imaginative skill, to make or bring into existence something new.

According to Carl Rodgers, "the emergence of a novel, relational product, growing out of the uniqueness of the individual."

According to Henry Miller, "the occurrence of a composition which is both new and valuable."

According to John Haefele, "the ability to make new combinations of social worth."

iv) Academic Achievement

Achievement refers to the scholastic or Academic achievement of the student at the end of an educational programme. A good number of variables such as personality characteristics of the learners, the Socio-economic status, the organizational climate of the school, curriculum planning etc., influence achievement in different degrees. These variables are generally referred to as correlates of achievement.

Goleman, (1996), Individual differences in academic performance for any academic programme have been linked to differences in intelligence and personality. For better academic performance and higher grades apart from IQ, other competencies like emotional self-awareness, optimism, achievement motivation, self-control and communication skills are also required.

Good, (1981), Academic achievement as the knowledge attained or skills developed in the school subjects, usually designated by test scores or marks assigned by the instructor of school.

Delimitations of the Study

Keeping in view the objectives and hypotheses, the present study has been delimited as follows:

1. The study focused on the secondary schools located in Vijayapura District.
2. Since the dependent variable is the Academic achievement in geography, only the performance of the students in IX standard is involved in the study.

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Time and frame work

Sl. No	Particulars	Duration
1	Identification of problem and Review of related literature	August 2021 to January 2022
2	Development of tool	February 2023 to July 2023
3	Data Collection	August 2023 to January 2024
4	Data Analysis, Finalizing Chapters, DTP	February 2024 to July 2024
5	Attending Colloquium Publication of articles and submission of synopsis	August 2024 to January 2025
6	Binding and Submission of Thesis	February 2025 to July 2025

Signature of the Guide **Signature of the research Scholar**

Signature of the Chairman